



Environmental Protection Agency

2200 Churchill Road, Springfield, Illinois 62706

file
COOK COUNTY
General
SHERWIN WILLIAMS

MEMORANDUM

Div of LPC

RECEIVED

DATE: November 3, 1981

TO: Dick Forbes

FROM: Vir V. Gupta

SUBJECT: Minutes of Meeting with Sherwin-Williams Company Located at 11541 South Champlain Avenue, Chicago

EPA Region 5 Records Ctr.



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E.P.A. - D.L.P.C.
STATE OF ILLINOIS

A meeting was held on October 28, 1981 in Springfield in the Episode Action Conference Room to discuss the permit application for the proposed burning of paracresol pitch in their #2 boiler. Cory Stoessand, Soong Yang, Bob Hensen, and Al Noren of the Sherwin-Williams Company, and Vir Gupta, Harish Desai, Tom Bierma, Mangu Patel and Jim Cobb of the Agency were present during the meeting.

Paracresol pitch is a waste material from their paracresol manufacturing plant, and contains about 82% biphenyl and biphenyl methane substituted compounds, 5% paracresol, and about 10% ditolyl sulfone. The company intends to blend this pitch with fuel oil in 1:1 ratio, and then burn in their 73 MBTU/hour boiler #2. Currently this pitch goes to permitted landfill for disposal.

During the meeting, it was pointed out to the representative of the company that the constituents of the pitch are highly toxic, and hence burning of this material is of public concern. The nearest residence is located only about 600 feet away, and the downwash of the flue gases (because of very poor exit velocity through the stack) may cause the ambient concentration to exceed the permissible limit (permissible limit is considered to be equal to TLV/300). Bob Hensen pointed out that the boilers were originally coal fired, and hence the stack which was built for coal fired boilers has a large diameter. He pointed out that the company intends to constrict the stack exit which should provide better plume rise. Mr. Soong Yang pointed out that the pitch will be burned only when two boilers are in operation. I told him that because of a very wide stack, probability of downwash is high even when two boilers are fired (these are coupled to a common stack).

I pointed out that based upon information supplied, about 1 ton of pitch will be fired per hour. Mr. Soong Yang clarified that the boilers are N. gas/oil fired, and some heat will be supplied by N. gas, and the quantity of pitch burned will be less than one ton per hour. Jim Cobb asked about the burnability and viscosity of the pitch. Cory said that the pitch has a pour point of about 80°C, and burns like #6 fuel oil. Jim pointed

out that because of high viscosity, pitch and fuel oil mixture may not burn completely. Bob Hensen pointed out that the company intends to buy CO monitors for installation in the stack to determine the extent of destruction of the pitch.

Mr. Soong Yang said that the components of the pitch have been identified only recently, and that they have not yet analyzed the bottom ash for toxic constituents. I pointed out that if the bottom ash is found to contain toxic chemicals, it may be necessary to apply for a permit to the Division of Land Pollution Control for disposal of this material. When asked about the quantity of bottom ash produced, Mr. Soong Yang pointed out that the boilers are cleaned only once in a year, and a few drums of bottom ash are collected, and sent for disposal.

When asked about the flue gas analysis, Mr. Soong Yang said that 100% destruction of the pitch is expected because of high temperature (about 2000°F), and high residence time (3-4 seconds) in the combustion chamber. He said that the representative flue gas analysis can only be obtained by carrying out an actual stack test. I pointed out that because of high toxicity of the material, appreciable downwash problem, and proximity of the boilers to the residential area, it will be necessary to carry out the stack test at a much lesser concentration of pitch in the fuel oil. Harish told the representative of the company to submit a complete stack test procedure for review so that a supplemental permit for carrying out a stack test can be considered. They were also told that both total hydrocarbons as well as individual hydrocarbon like biphenyls and paracresol need to be analyzed during the stack test.

Since the permit application for paracresol pitch handling system also includes process for separation of paracresol and toluene sulfonic acid from pitch, Harish told them to submit necessary information on the forms, so that a permit for this separation process can be granted.

VVG:sd/2317c/9-10

cc: Bharat Mathur
Dan Goodwin
Sy Levine
Jim Cobb
Harish Desai

✓ Tom Cavanaugh